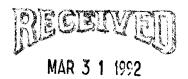
## COAL MINING AND RECLAMATION OPERATIONS FOR 1991

(Must be submitted to the Division by March 31, 1992)

State of Utah Department of Natural Resources Division of Oil, Gas and Mining 3 Triad Center, Suite 350 355 West North Temple Salt Lake City, Utah 84180-1203 (801) 538-5340



DIVISION OF

Permittee:

Co-Op Mining Company

OIL GAS & MINING

Mine Name:

Bear Canyon Mine / Trail Canyon Mine

Mailing Address:

53 West Angelo Ave. Salt Lake City, Utah 84115

Company Representative: Kimly C. Mangum, P.E., M.E.C.

Resident Agent:

Mr. Wendell Owen, Co-Op Mining Co.

P. O. Box 1245 Huntington, Utah

Permit Number:

ACT/015/025 & ACT/015/021

MSHA ID Number:

MSHA #42-00081-0

Date of Initial Permanent Program Permit: Nov. 1, 1985 / May 30, 1989

Date of Permit Renewal:

Nov. 1, 1990\*/ May 30, 1989

Quantity of Coal Mined (tonnage) 1991:

432.140 tons

**Attach Updated Mine Sequence Map** 

(Same as Lease Royalty Payment Map and/or MSHA Progress Map)

All monitoring activities during the report period to be submitted with this report (including, but not limited to):

- **Summarized Water Monitoring Data:** 
  - List of monitoring points and their locations and respective frequencies of monitoring (monthly, quarterly, etc.) as approved in the PAP
  - UPDES permit number, UPDES discharge points and their locations
  - Summary of findings based on water monitoring during 1991
  - Submit water monitoring as database files (ASCII, Lotus, dBase, etc.) (Please contact Ken Wyatt if you have any questions)
- B. Precipitation or Other Climatological Data (please submit as database files: ASCII, Lotus, dBase, etc.-- Contact Ken Wyatt if you have any questions)

## C. Subsidence Monitoring Report:

- 1. Brief description of monitoring system (monuments or aerial surveys, how monitoring is done, how frequently monitoring is done)
- 2. List of all monitoring points (if any) and their locations and amount of displacement of each
- 3. Map showing either monitoring points (if any) or a representation of subsidence which has occurred
- Any owners and/or occupants of surface property and structures above the underground workings who were or will be mailed notification six months prior to mining (R614-301-525.300)
- D. Vegetation Data (test plots) or Revegetation Success Monitoring (includes interim and final):
  - 1. Test plot monitoring data or implementation
  - 2. Quantitative results from Interim or final seeding efforts
  - 3. If quantitative monitoring was not required, then at minimum, a qualitative description of the interim or final vegetation
  - 4. Describe any seeding done on site during the current year
- E. Annual Impoundment Certification, (R614-301-514.312) which includes the following information:
  - 1. Any appearances of instability
  - 2. Structural weakness or other hazardous conditions
  - 3. Depth and elevation of any impounded waters
  - 4. Existing storage capacity
  - 5. Any existing or required monitoring procedures and instrumentation
  - 6. Any other aspects of the structure affecting stability

## Suggested form enclosed

- F. Annual Overburden, Spoil, Refuse, Roof, Floor, and Mid-Seam Data. For Consistency and completeness, please submit data for this reporting requirement in the following manner:
  - 1. Location of sample site, sample interval, and sample matrix (if roof or floor, then include lithologic unit and if coal, then thickness of seam at sample site)
  - Sampling technique employed in the field (i.e., grab sample, composite, depth segregated or specific procedure outlined in the permit by chapter and page) and preparation prior to analysis (i.e., sieved sample, ground sample, air dried, oven dried, etc.)
  - 3. Laboratory analysis report sheet which includes:
    - i. Sample time and date
    - ii. Date and time of lab analysis
    - iii. Analytical method(s) employed and references. Include the soil/spoil: water ratio.
  - 4. Summary of findings based on monitoring
- G. Any Other Information Required to be Submitted as Specified in your Permit Application Package and Permit

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